

Volume 4. Aircraft Equipment and Operational Authorizations

CHAPTER 4. MINIMUM EQUIPMENT LISTS (MEL) AND CONFIGURATION DEVIATION LISTS (CDL)

SECTION 7. NONESSENTIAL EQUIPMENT AND FURNISHINGS (NEF) PROGRAM

1251. GENERAL. This section contains specific direction, guidance, and procedures to be used by aviation safety inspectors (ASI) when evaluating and approving a Minimum Equipment List (MEL) Nonessential Equipment and Furnishings (NEF) Program of operations conducted under 14 CFR parts 91, 91 subpart K, 121, 135, 125, and 129.

1253. DISCUSSION. Prior to issuance of Policy Letter 116, the FAA Master Minimum Equipment List (MMEL) provided relief for Passenger Convenience Items (PCI) that limited relief to the cabin, galley, and lavatory areas. Many operators deferred inoperative, damaged, or missing equipment or instruments not located in these areas via means other than the Minimum Equipment List (MEL) or Configuration Deviation List (CDL) (i.e., air carrier internal deferral programs authorized by their maintenance program).

A. Other than under the provisions of an approved MEL or CDL, the regulations do not provide for the deferral of inoperative, damaged, or missing equipment or instruments. Because the PCI is limited to the areas described above, the FAA is replacing the current PCI title in ATA chapter 25 of all MMELs with the new term, NEF.

B. Operators may use the deferral authority granted in the MMEL as a basis for developing an operator-specific program, approved through the MEL, that provides relief for inoperative, damaged, or missing non-essential equipment and furnishings located throughout the aircraft. Although the NEF program is listed under chapter 25, it may address items that would fall under other ATA chapters.

1255. NONESSENTIAL EQUIPMENT AND FURNISHINGS (NEF). NEF are those items installed on the aircraft as part of the original type certification, supplemental type certificate, or other form of alteration that have no effect on the safe operation of flight and would not be required by the applicable certification rules or operational rules. They are those items that, if inoperative, damaged, or missing, have no effect on the aircraft's ability to be operated safely under all operational conditions. These nonessential items may be installed in areas including, but not limited to, the passenger compartment, flight deck area, service areas, cargo areas, crew rest areas, lavatories, and

galley areas. NEF items are not items already identified in the MEL or CDL of the applicable aircraft. They do not include items that are functionally required to meet the certification rule or for compliance with any operational rule. The operator's NEF process shall not provide for deferral of items within serviceable limits identified in the manufacturer's maintenance manual or operator's approved maintenance program such as wear limits, fuel/hydraulic leak rates, oil consumption, etc. Cosmetic items that are fully serviceable but worn or soiled may be deferred under an operator's NEF process.

A. By definition, NEF items do not affect the safe operation of an aircraft. Due to the wide variance of these items from aircraft to aircraft, a complete list of NEF items is not required to be maintained in the operator's MEL, but in a list or other equivalent method of tracking.

B. NEF program items are not approved through the normal Flight Operations Evaluation Board (FOEB) process. The operators, through their approved NEF program, identify program items. The operators are responsible for designing, implementing, maintaining, and revising the NEF program.

(1) The fundamental elements for an operator obtaining approval of an NEF Program are the operator's:

- development of procedures and processes for identifying items that may be deferred
- development of appropriate procedures
- documentation of inoperative, damaged, or missing items
- reporting of deferrals to the FAA office charged with program oversight, and
- procedures for follow-up maintenance

(2) The FAA does not require that NEF items be listed in the MEL. Although it is not required for an operator to develop a list of NEF items, development of such a list will reduce both the operator's and the FAA's time spent analyzing recurring deferrals of the same items. An NEF list (or equivalent) will also provide flightcrews, maintenance, and operations personnel, if applicable, with any applicable maintenance and operations (M & O) procedures

necessary for the safe operation of the aircraft. If an operator chooses to develop a list of NEF items, that list can be maintained in a manner and location agreed to by the CHDO. The operator's NEF program must prescribe repair intervals for NEF items. Operators may use the current MEL deferral categories at their discretion.

C. The NEF Program should be designed so that it can be managed at the local CHDO level to provide expedited handling of NEF items. Except as specified below, operators must submit their NEF program to the CHDO for approval via the normal MEL approval process. Any portions of an NEF program submitted to the CHDO for approval that references maintenance must comply with standard practices defined in 14 CFR § 43.13 or applicable approved data. Part 91 operators (other than 91 subpart K) need not submit their NEF deferral program (and NEF list if applicable) to the local FSDO for approval but will make it available for FAA review upon request.

D. Once the program has been approved by the CHDO, a reference to the program must be incorporated into MEL ATA chapter 25 (see Policy Letter 116).

1257. NEF PROGRAM. This paragraph provides general guidance for development and approval of an operator's NEF program. For specific guidance used to approve the operators NEF program refer to FAA Order 8300.10, volume 2. An NEF program encompasses an NEF list (or equivalent), a process for evaluating an item in accordance with NEF, reporting procedures to the CHDO, and repair and/or replacement policy and procedures. Failure to comply with the CHDO approved NEF program may result in the removal of the authorization to participate in the NEF portion of the MEL.

A. *NEF List.* In order to identify items that may be included in the NEF Program, the operator's program should closely follow the recommendations prescribed below. As NEF items are identified, they should be added to a list (or other means acceptable to the CHDO). It may be expeditious to develop a list of known or agreed to NEF items for inclusion in the initial program. As more items are identified through the NEF process, these items should be

added to the list to preclude having to reexamine the same items through the decision making process. The NEF list and process may reside together, or separately, in the location and in a manner selected by the applicant and acceptable to the CHDO. Whether in paper or electronic format, the applicable portions of the list and process must be available to the flightcrew, maintenance, and flight operations personnel when items are being deferred in accordance with ATA-25, Nonessential Equipment and Furnishings (NEF). The NEF list in most cases should be comprehensive but may be listed in general terms with the concurrence of the CHDO. As an example, cosmetic trim-strips may be listed in general terms rather than identifying each strip individually on the NEF list.

NOTE: Although the term "list" is used throughout this section, a physical list need not be developed and maintained, nor does an operator need to include the specific NEF items inside the MEL. Operators participating in the NEF program that choose not to develop an NEF list must treat each NEF deferral as a newly discovered NEF item, as outlined in the NEF program. Development of an NEF list should be encouraged as it will reduce the operator's time spent analyzing recurring deferrals of the same item.

B. *NEF Reporting.* Operators will work together with their CHDO to determine a mutually acceptable timeframe in which the newly identified and deferred NEF items will be reported to the CHDO for review

1259. EXPANDED FLOWCHART OF NEF PROCESS. Figure 4.4.4.1, below, is an expanded description of the flowchart provided in figure 4.4.4.2 and represents a sample process that should be considered when approving an NEF Program. The flowchart is provided as a guide for developing an NEF deferral process. The process may be modified to facilitate inclusion in an operator's overall MEL deferral program; however, the intent of the elements outlined in the flowchart below must be addressed.

1260. - 1334. RESERVED.

Figure 4.4.4.1. Flowchart steps (elements) identified in figure 4.4.4.2

1.0 Discrepancy noted in aircraft logbook. The inoperative, damaged, or missing item must be identified and documented in the aircraft logbook (or other approved location) per the operator's discrepancy reporting system by:

1.0 Discrepancy noted in aircraft logbook

1. Flightcrew; or
2. Company maintenance personnel; or
3. Personnel authorized and approved to perform such functions as outlined in the operator's maintenance program.

2.0 Can the item be deferred in accordance with (IAW) the MMEL, CDL, or operator's MEL?

2.0 Can the item be deferred IAW the MMEL/MEL/CDL?

1. If the inoperative, damaged, or missing item is listed in the MMEL, CDL, or operator's MEL, then the deferral procedures for that item must be followed. If the item is a subcomponent of a primary system identified in the MMEL/MEL/CDL, where no previous relief was authorized, the subcomponent **may not be deferred** in accordance with the NEF procedures outlined in chapter 25 of the MMEL or MEL.

2.1 Follow MEL/CDL procedures.

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1. If the item is identified in another part of the MEL/CDL, then the procedures approved for the deferral of such item must be followed.

3.0 Is item on the NEF deferral list?

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1. Is the item on the NEF list? If yes, then follow the NEF deferral procedures in step 3.1. (Items that are not previously on the operators NEF list should proceed to step 4.0)

NOTES:

- a. On initial approval of the NEF program, each operator may develop a list of items that it wants to include in the NEF list. This list should be coordinated internally with all appropriate lines of business for that specific operator. The CHDO will review the initial list (if included) prior to acceptance of the operator's program.
- b. This list does not have to be part of the standard MEL and may be kept in a form and manner as agreed upon by the operator and the CHDO. The NEF list, or the

appropriate portions thereof, should be available to the flight crew, flight operations, and maintenance personnel.

3.1 Defer item IAW the NEF deferral program.

3.1 Defer item
IAW the NEF
program

1. If the item is identified in the NEF deferral list, then the procedures approved for the deferral of such item shall be followed.

4.0 Does the item affect the safety of flight?

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affect the safety of
flight?

1. Is it obvious from a maintenance or operational perspective that the item, in and of itself, could have an adverse effect on the safe conduct of flight? If there is an obvious safety-of-flight issue, then the inoperative, damaged, or missing item may not be deferred and step 4.1 shall be followed.

4.1 Repair item prior to flight.

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flight.

1. The item may not be deferred and must be repaired prior to flight.

5.0 Can source (underlying cause) of the discrepancy be identified? (If applicable)

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(underlying cause)
of the discrepancy
be identified?

1. Can the source of the discrepancy be identified? This step may or may not apply to the item under consideration. If the source can be identified, then proceed to step 6.0, otherwise proceed to step 4.1.

6.0 Can source (underlying cause) of discrepancy affect equivalent levels of safety?

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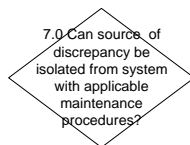
1. If the source (underlying cause) of the discrepancy affect equivalent levels of safety, then it must be determined if it can be isolated from all other systems so as to alleviate any safety concern.

**** Note:** In making this determination, very close coordination between the flight crew, maintenance and operations personnel may be required.

2. If, after review, the source of the discrepancy could be considered a safety-of-flight concern, the item must be repaired prior to flight (step 4.1). If the source of the discrepancy is not a safety-of-flight concern then defer the item in accordance with the

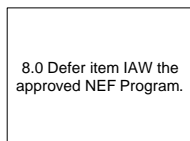
approved NEF procedures in step 8.0. If it cannot be determined, or is uncertain, that the source of the discrepancy is a safety-of-flight concern then proceed to 7.0.

7.0 Can source (underlying cause) of discrepancy be isolated from the system with applicable maintenance procedures?



1. If applicable, the source (underlying cause) of the discrepancy must be isolated from all other systems so as to alleviate the safety-of-flight concern.
2. If the item cannot be safely isolated then the item must be repaired prior to flight (step 4.1).
3. If isolated, the isolation of the source must pass the entire test previously identified in the evaluative process (steps 4.0-7.0) for the item.
4. If source can be isolated then proceed to step 8.0.

8.0 Defer Item IAW the approved NEF program.



1. Defer the item if, after completing the previous 7 steps, the item can be deferred IAW the NEF program.

Note: Before an operator can defer a NEF item, the operator must follow their CHDO approved program for determining if an item can be considered an NEF item. Although NEF items are not safety-of-flight items, they have not been evaluated through the normal AEG review process and therefore may require the concurrence of the flight crew, maintenance, and operational personnel, if applicable. NEF items are **not** deferred under the authority of an airframe and powerplant certificate but rather the company/operator is deferring the item under their approved NEF program.

The evaluation process should determine items such as:

- a. Is the item required for the operational rules in which the aircraft is operated?
- b. Does it create the potential for fire/smoke or other hazardous conditions?
- c. Could it have an adverse effect on other required systems or components?
- d. Does its condition potentially affect the safety of passengers, crew, or service personnel?
- e. Could it have a negative impact on emergency or abnormal procedures?

- f. Does it create additional workload for the crew at critical times of flight or flight preparation?
- g. Crewmembers may need to evaluate the deferred NEF on a flight-by-flight basis.

Note: The above evaluation process must be accomplished for the inoperative, damaged, or missing items at its face value, and also for the underlying cause of the discrepancy.

9.0 Update NEF deferral list as required.

9.0 Update NEF Deferral
List as required.

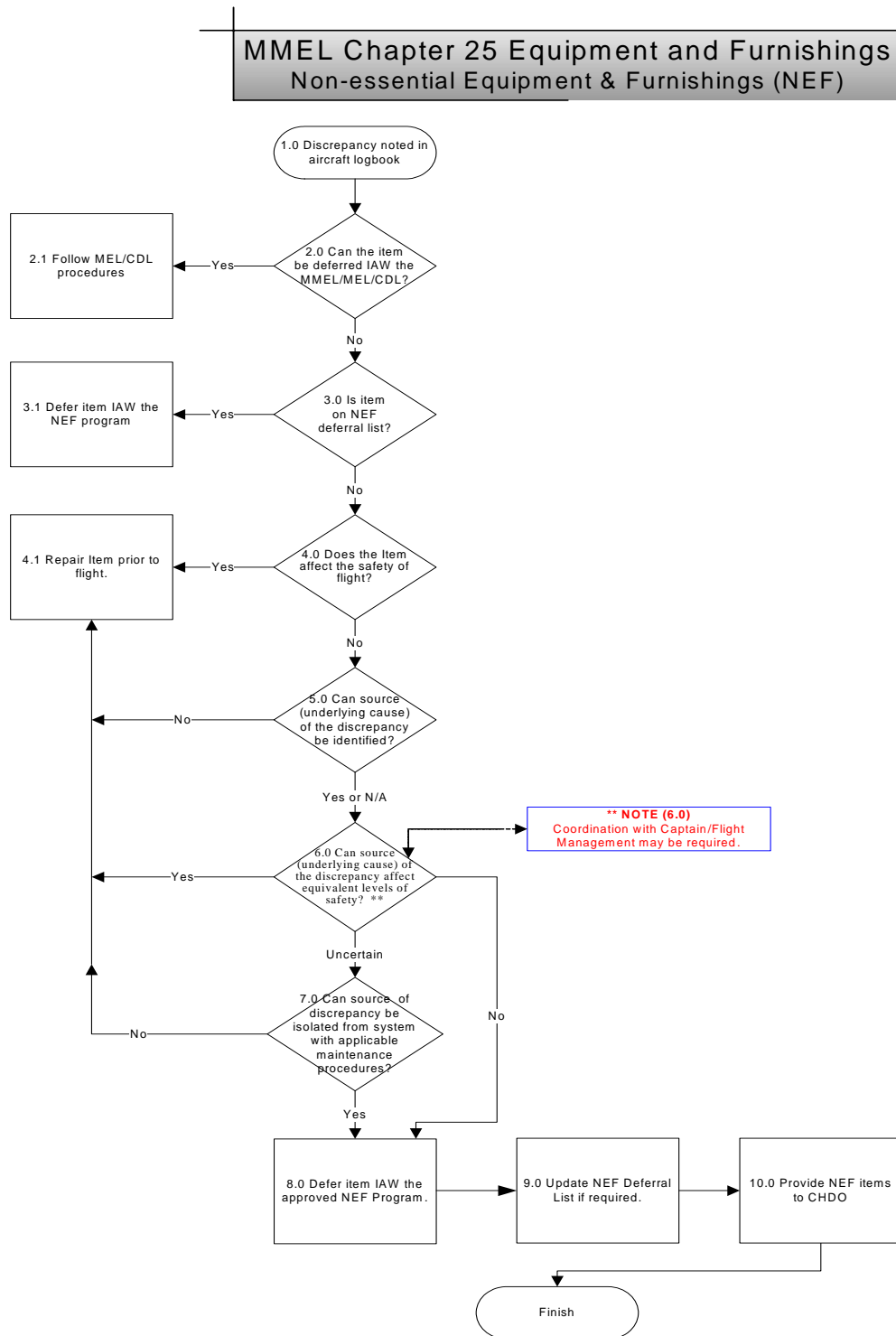
1. Operators will continually add items to their NEF list as they see fit. If applicable, the operator must control the NEF list and revise it accordingly.

10.0 Provide NEF Items to CHDO.

10.0 Provide NEF Items
to CHDO.

1. At intervals agreed to by both the PI and the air carrier, the air carrier will provide the items placed in the NEF program to the CHDO for review. This review is not to be conceived as a requirement to approve the NEF items. It is merely a means to provide oversight to ensure the program is effective.

FIGURE 4.4.4.2



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